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CLAIMS

1. A method for feeding a tape of slider-zipper assemblies to an applicator, said tape comprising a multiplicity of zipper segments, each of said zipper segments having a slider slidably mounted thereto, comprising the step of passing a portion of said tape through a channel having a cross section that allows passage therethrough of the slider of each successive slider-zipper assembly, said channel being formed to limit turning of said slider about any axis.

2. The method as recited in claim 1, wherein at least one slider resides within said channel at all times during said passing step.

3. An automated method for applying slider-zipper assemblies to a thermoplastic film, comprising the steps of:

forming slider stops at intervals along the length of a zipper tape;

mounting a respective slider along a respective length of said zipper tape lying between a respective pair of successive slider stops to form a tape of slider-zipper assemblies;

passing a portion of said tape through a channel having a cross section that allows passage therethrough of the slider of each successive slider-zipper assembly, said channel being formed to limit turning of said slider about any axis;

cutting off a slider-zipper assembly from said tape; and

attaching said slider-zipper assembly to said thermoplastic film.

4. The method as recited in claim 3, wherein at least one slider resides within said channel at all times during said passing step.

5. The method as recited in Claim 3, further comprising the step of passing flange portions of said zipper tape through a nip between two rollers and driving the rotation of one of said rollers in a direction to pull said tape of slider-

zipper assemblies through said channel.

6. An apparatus for feeding a tape of slider-zipper assemblies, comprising a slider guide having a channel running the length of said slider guide, said channel having a cross section that allows passage therethrough of the slider of each successive slider-zipper assembly of said tape, said channel being formed to limit turning of said slider about any axis.

7. The apparatus as recited in claim 6, wherein said slider guide comprises upper and lower slider guides.

8. The apparatus as recited in claim 6, wherein said channel cross section is substantially constant.

9. The apparatus as recited in claim 6, wherein said channel has a length equal to at least the length of a slider-zipper assembly.

10. The apparatus as recited in claim 6, further comprising first and second rollers for forming a nip therebetween, said first and second rollers having first and second grooves respectively, said first groove in said first roller being in line with said second groove in said second roller, said in-line first and second grooves forming a space downstream of an outlet of said slider guide, the widths and depths of said first and second grooves being selected to allow passage of said sliders through said space.

11. The apparatus as recited in claim 10, wherein said channel cross section and said space are aligned.

12. The apparatus as recited in claim 10, further comprising:

first and second mounting plates;

first and second bearings respectively mounted to said first and second mounting plates and supporting said second roller; and

a guide plate mounted to said first and second mounting plates and having a guide surface disposed to guide zipper flanges of said tape toward said nip.

13. The apparatus as recited in claim 12, wherein said slider guide comprises upper and lower slider guides, said lower slider guide being mounted to said guide plate, and said second slider guide being mounted to said first slider guide.

14. An assembly comprising:

a tape comprising a continuous zipper tape having a multiplicity of sliders slidably mounted thereto at intervals therealong;

a slider guide having a channel running the length of said slider guide, a portion of said tape, including at least one slider, residing within said channel, said channel being formed to limit turning of said slider about any axis; and

a drive mechanism in contact with said zipper tape for advancing said tape along said channel.

15. The assembly as recited in claim 14, wherein said slider guide comprises upper and lower slider guides.

16. The assembly as recited in claim 14, wherein said drive mechanism comprises first and second rollers for forming a nip therebetween, said first and second rollers having first and second grooves respectively, said first groove in said first roller being in line with said second groove in said second roller, said in-line first and second grooves forming a space downstream of an outlet of said slider guide, the widths and depths of said first and second grooves being selected to allow passage of said sliders through said space.

17. The assembly as recited in claim 16, wherein said channel cross section and said space are aligned.

18. The assembly as recited in claim 14, wherein said drive mechanism comprises an idler roller and a nip roller having respective roller faces which meet squarely to form a nip, and said zipper tape comprises a pair of zipper flanges threaded between said roller faces.

19. The assembly as recited in claim 18, further comprising:

first and second mounting plates;

first and second bearings respectively mounted to said first and second mounting plates and supporting said idler roller; and

a guide plate mounted to said first and second mounting plates and having a guide surface disposed to guide zipper flanges of said tape toward said nip.